

## 18. AGRICULTURE

**Table 18-1. FEDERAL RESOURCES IN SUPPORT OF AGRICULTURE**  
(In millions of dollars)

Function 350	1998 Actual	Estimate					
		1999	2000	2001	2002	2003	2004
<b>Spending:</b>							
Discretionary Budget Authority ....	4,346	4,318	4,140	4,140	4,153	4,140	4,140
Mandatory Outlays:							
Existing law .....	7,879	16,445	10,942	8,757	7,342	6,032	6,198
Proposed legislation .....	.....	.....	-20	-37	-33	-30	-38
<b>Credit Activity:</b>							
Direct loan disbursements .....	8,222	10,802	11,640	N/A	N/A	N/A	N/A
Guaranteed loans .....	4,226	6,563	6,688	N/A	N/A	N/A	N/A
<b>Tax Expenditures:</b>							
Existing law .....	780	880	905	950	985	1,035	1,085

N/A = Not available

The Federal Government helps to increase U.S. agricultural productivity by ensuring that markets function fairly and predictably and that farmers and ranchers do not face unreasonable risk. Agriculture Department (USDA) programs disseminate economic and agronomic information, ensure the integrity of crops, inspect the safety of meat and poultry, and help farmers finance their operations and manage risks from both weather and variable export conditions. The results are found in the public welfare that Americans enjoy from an abundant, safe, and inexpensive food supply, free of severe commodity market dislocations. Agriculture and its related activities account for 16 percent of the U.S. Gross Domestic Product.

### Conditions on the Farm

Economic conditions facing U.S. agriculture in 1998 challenged this Federal role. Demand for farm commodities and record market prices of recent years receded, with gross crop cash receipts falling seven percent from the record \$112 billion in 1997. Net cash income fell \$1.7 billion short of the 1997 record of \$60.8 billion. Forecasts for 1999 put net cash income down \$5 billion from the record level, but within the last five

year's average. Producers are expected to earn slightly less from 1998 and 1999 crop sales due to lower feed grain prices. Livestock receipts in 1998 fell back to the 1996 level of \$93 billion from 1997's record \$96.6 billion. Beef cattle prices, continued to decline, despite reductions in the herd. Pork producers, with long-expanding inventories experienced a severe drop in hog prices (see Chart 18-1).

Macro-economic agricultural conditions in 1998 were nearly the reverse of conditions that led to record farm income and prices of recent years. Last year, world-wide production of major grains was robust, which weakened demand for U.S. crops; the Asian financial crisis dampened a major source of export growth; the U.S. livestock sector experienced some relief in reduced feed costs. These conditions prompted the Federal Government to expand spending on agriculture, including \$5.9 billion in emergency disaster relief enacted in the 1999 Omnibus Consolidated and Emergency Supplemental Appropriations Act.

Despite generally lower commodity prices, farm assets and equity continue to rise. Farm sector business assets rose four percent in value in 1998, to \$1.13 trillion. Farm

asset values will remain at historic high levels in 1999, while farm real estate values will rise for the eleventh straight year. Farm business debt will rise in 1999, attaining its highest level since 1986; but debt-to-equity and -to-asset ratios improved in 1998 and are much stronger than on the eve of the financial stress in the 1980s farm sector. However, a continuation of low commodity prices may cause increasing financial stress for many producers. In 1998, an index of farm debt as a percentage of the maximum debt producers could pay at current income levels rose to 60 percent from 45 percent in the early 1990s.

Exports are key to future U.S. farm income. The Nation exports 30 percent of its farm production, and agriculture produces the greatest balance of payments surplus, for its share of national income, of any economic sector. Agricultural exports reached a record \$60 billion in 1996. Lower world market prices and bulk export volume reduced exports by an estimated \$4 billion in 1998 and

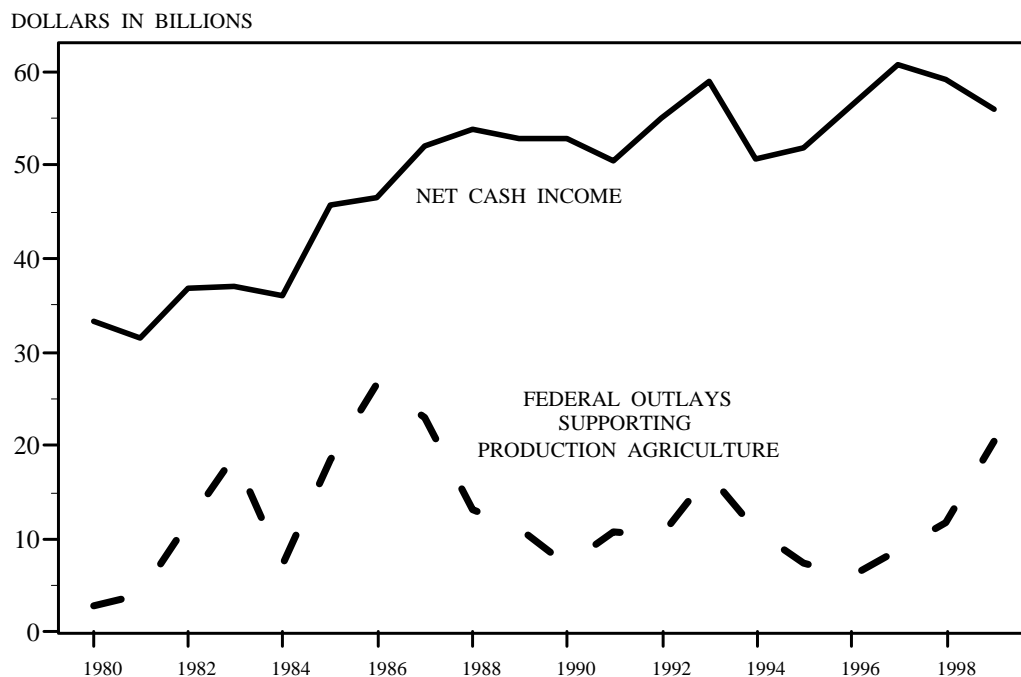
in 1999 export growth is likely to be minimal. Pacific Asia, including Japan, is the most important region for U.S. farm exports, accounting for 42 percent of total U.S. export sales in 1996. Consequently, the financial turmoil in certain Asian countries significantly affects U.S. exports.

### The 1996 Farm Bill

Known officially as the Federal Agriculture Improvement and Reform Act (FAIR) of 1996, the Farm Bill was a milestone in U.S. agricultural policy. The bill, effective through 2002, fundamentally redesigned Federal income support and supply management programs for producers of wheat, corn, grain sorghum, barley, oats, rice, and cotton. It expanded the market-oriented policies of the previous two major farm bills, which have gradually reduced the Federal influence in the agricultural sector.

Under previous laws dating to the 1930s, farmers who reduced plantings could get income support payments when prices were

**Chart 18-1. FARM SECTOR INCOME AND FEDERAL SUPPORT**



Note: 1999 forecast by USDA.

low, but farmers had to plant specific crops in order to receive such payments. Even when market signals encouraged the planting of a different crop, farmers had limited flexibility to do so. By contrast, the 1996 Farm Bill eliminated most such restrictions and, instead, provided fixed, but declining payments to eligible farmers through 2002, regardless of market prices or production volume. This law “decoupled” Federal income support from planting decisions and market prices. The law has brought changes in the crop acreage planted in response to market signals. In 1997, wheat acreage fell by six percent, or about five million acres, from the previous year, while soybean acreage rose by 10 percent, or over six million acres.

The Farm Bill’s freedom from planting restrictions on farmers meant greater potential volatility in crop prices and farm income. Not only can USDA no longer require farmers to grow less when supplies are great, but the size of farm income-support payments no longer varies as crop prices fluctuate. The previous farm bills were not perfectly counter-cyclical: participants in USDA commodity programs whose crops were totally ruined when prices were high got no income-support payment then, but would now through fixed payments. And, the 1996 Farm Bill provides additional “marketing loan” payments to farmers when commodity prices fall below a statutorily set “loan rate”. However, the 1998 conditions raised the issue of whether the Federal farm income safety net was sufficient, and how should it be improved, to a new urgency.

However, the 1998 crop and price situation showed that the 1996 Farm Bill does not sufficiently protect farm income under certain conditions. Some crop prices significantly decreased from previous years—but the Farm Bill’s “decoupled” income assistance did not adjust upward to compensate. If in the future commodity prices are again unacceptably low, the Administration will work to secure farm income assistance.

The 1998 crop experience also highlighted problems with the crop insurance program, which is intended to be the foundation of the farm safety net. Farmers who experience

multi-year losses are left with insufficient coverage at higher cost; there is no coverage available for many commodities including livestock; and, most fundamentally, coverage that provides adequate compensation is simply not affordable for many farmers. During the coming year, the Administration will work to find a bipartisan solution, including offsets, that will address these weaknesses by reforming crop insurance and strengthening the safety net for farmers.

### **Federal Programs**

USDA seeks to enhance the quality of life for the American people by supporting production agriculture; ensuring a safe, affordable, nutritious, and accessible food supply; conserving agricultural, forest, and range lands; supporting sound development of rural communities; providing economic opportunities for farm and rural residents; expanding global markets for agricultural and forest products and services; and working to reduce hunger in America and throughout the world. (Some of these missions fall within other budget functions and are described in other chapters in this Section.)

Farming and ranching are risky. Farmers and ranchers face not only the normal vagaries of supply and demand, but also uncontrollable risk from nature. Federal programs are designed to accomplish two key economic goals: (1) enhance the economic safety net for farmers and ranchers; and (2) open, expand, and maintain global market opportunities for agricultural producers.

The Federal Government mitigates risk through a variety of programs:

***Federal Farm Commodity Programs:*** Since most Federal income support payments under the 1996 Farm Bill are now fixed, farm income can fluctuate more from year to year due to supply and demand changes. Farmers must rely more on marketing alternatives, and develop strategies for managing financial risk and stabilizing farm income. However, in response to unprecedented crop/livestock price decreases and regional production problems, Congress included as part of the \$5.9 billion in emergency disaster relief provided in the 1999 Omnibus Consolidated and Emergency Supplemental Appropriations Act an additional

\$2.8 billion in income-support payments, above the 1996 Farm Bill authorized level of \$5.6 billion. In addition, the Federal Government continues to provide other safety-net protections, such as the marketing assistance loans that guarantee a minimum price for major commodities, that paid producers \$1.7 in 1998 and will pay them an estimated \$2 billion in 1999.

**Insurance:** USDA helps farmers manage their risks by providing subsidized crop insurance, delivered through the private sector, which shares the insurance risk with the Federal Government. Farmers pay no premiums for coverage against catastrophic production losses, and the Government subsidizes their premiums for higher levels of coverage. Over the past three years, an average 65 percent of eligible acres have been insured, with USDA targeting an average indemnity payout of \$1.08 for every \$1 in premium, down from the historical average indemnity of \$1.40 for every \$1 in premium. Crop insurance costs the Federal Government about \$1.5 billion a year, including USDA payments to private companies for delivery of Federal crop insurance.

Early in 1999, as part of the \$5.9 billion in emergency disaster relief, the President signed into law over \$2 billion in supplemental crop insurance payments in response to severe crop losses in 1998. Payments also were made to uninsured farmers, but with the requirement that those farmers purchase insurance in the 1999 and 2000 crop years. Consequently, crop insurance participation, and therefore subsidy costs, are expected to increase in these years, with the percentage of eligible acres insured rising toward 70 percent. USDA also continues to develop crop insurance policies on new crops and expand several insurance products that mitigate revenue risk—price and production risk combined. These revenue insurance pilots have shown that farmers generally want these types of products, and USDA will continue to expand their application and availability.

**Trade:** The trade surplus for U.S. agriculture declined by about 10 percent in 1998 to \$16.6 billion, after experiencing faster growth in recent decades than any other sector of the economy. USDA's international programs helped to shape that growth, and cushion

the drop in foreign demand. The Foreign Agriculture Service's efforts to negotiate, implement, and enforce trade agreements play a large role in creating a strong market for exports.

In 2000, USDA will:

- take action to overcome 700, or 15 percent, more trade barriers than in 1999; and
- generate 6,000 trade leads for U.S. agricultural export sales, an increase of 20 percent.

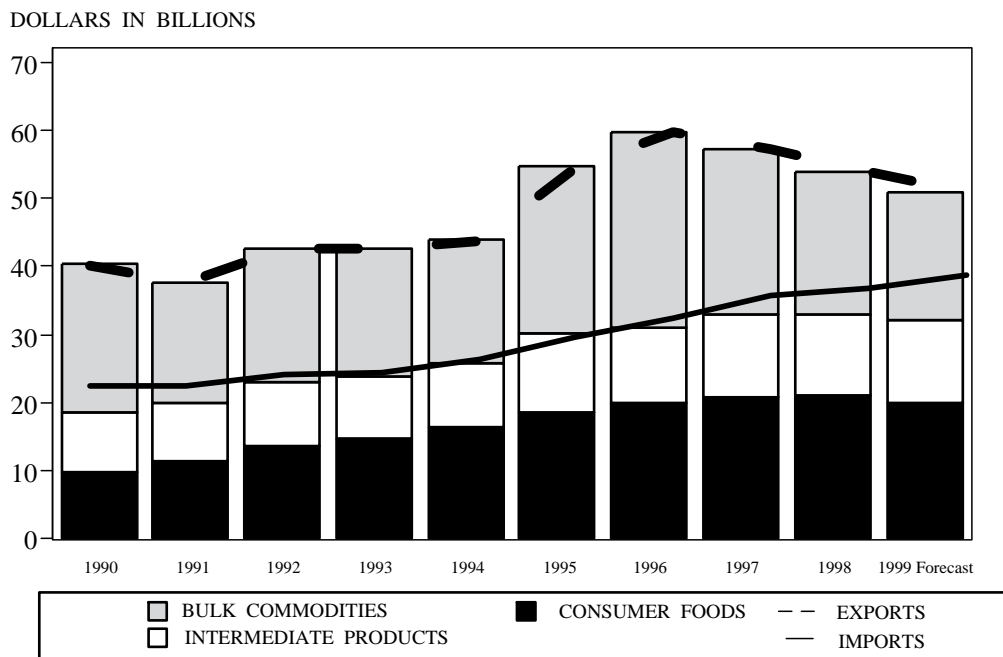
USDA is authorized to spend over \$1 billion in 2000 on export activities, (\$3.5 billion will be spent in 1999), including subsidies to U.S. firms facing unfairly-subsidized overseas competitors, and loan guarantees to foreign buyers of U.S. farm products. USDA also helps firms overcome technical requirements, trade laws, and customs and processes that often discourage the smaller, less experienced firms from taking advantage of export opportunities. USDA outreach and exporter assistance activities help U.S. companies address these problems and enter export markets for the first time.

USDA programs also help U.S. firms, especially smaller-sized ones, export more aggressively, and high-value products now account for more than half of export value even as total U.S. farm exports have been declining recently (see Chart 18-2). By participating in the Market Assistance Program (MAP) or USDA-organized trade shows, firms can more easily export different products to new locations on their own. Small and medium-sized firm recipients (those with annual sales of under \$1 million) now represent 94 percent of the MAP branded-promotion spending, up from 70 percent in 1996, and USDA expects to raise that figure to 100 percent in 1999.

In 2000, USDA will:

- assist 2,000 U.S. firms to establish export activities and oversee marketing distribution channels; and
- increase the percentage of new firms that the MAP supports in establishing marketing and distribution channels by eight percent, to 70 firms for a total of 1,700 participants.

**Chart 18-2. U.S. AGRICULTURAL EXPORT PROFILE  
AND TRADE SURPLUS**



Notes: High-value products now make up over 50 percent of total exports.  
Trade surplus was at \$21.5 billion in 1997.

**Agricultural Research:** The Federal Government spends approximately \$1.8 billion a year to support agricultural research and enhance U.S. and global agricultural productivity. The average annual return to publicly-funded agricultural research exceeds 35 percent, according to recent academic estimates.

The Agricultural Research Service (ARS) is USDA's in-house research agency, addressing a broad range of food, farm, and environmental issues. It puts a high priority on transferring its research findings to the private sector.

In 2000, ARS expects to:

- submit 70 new patent applications;
- participate in 90 new Cooperative Research and Development Agreements;
- license 30 new products; and
- develop 70 new plant varieties to release to industry for further development and marketing.

The Cooperative State Research, Education, and Extension Service provides grants for agricultural, food, and environmental research; higher education; and extension activities. The National Research Initiative competitive research grant program, launched in 1990 on the recommendation of the National Research Council, works to improve the quality and increase the quantity of USDA and private sector farm, food, and environmental research. In addition, the Agricultural Research, Extension, and Education Reform Act of 1998 authorized \$120 million annually in mandatory funds for certain priority research, although appropriations action blocked these funds for 1999.

**Economic Research and Statistics:** The Federal Government spends about \$155 million to improve U.S. agricultural competitiveness by reporting and analyzing economic information. The Economic Research Service provides economic and other social science information and analysis for decision-making on agriculture, food, natural resources, and rural de-

velopment policy. The National Agricultural Statistics Service (NASS) provides estimates of production, supply, price, and other aspects of the farm economy, providing information that helps ensure efficient markets.

- In 2000, NASS will include over 95 percent of national agricultural production in its annual commodities reports, up from 92 percent in 1997.

**Inspection and Market Regulation:** The Federal Government spends a half-billion dollars a year to secure U.S. cropland from pests and diseases and make U.S. crops more marketable. In addition, USDA's Food Safety and Inspection Service reduces the risk that U.S. meat and poultry products will threaten consumers' health (see Chapter 23, "Health"). The Animal and Plant Health Inspection Service (APHIS) inspects agricultural products that enter the country; controls and eradicates diseases and infestations; helps control damage to livestock and crops from animals; and monitors plant and animal health and welfare. The Agricultural Marketing Service (AMS) and the Grain Inspection, Packers, and Stockyards Administration help market U.S. farm products in domestic and global markets, ensure fair trading practices, and promote a competitive, efficient marketplace.

In 2000, APHIS will:

- make about 83 million inspections of incoming passengers (mainly from airlines) to prevent the entry of illegal plants and animals that could endanger U.S. agriculture, a slight increase over estimated 1999 levels;
- make about 72,000 interceptions of pests (an interception may involve more than one pest specimen) that could endanger U.S. agriculture, about the same as 1999;
- clear most international air passengers through its inspection process in 30 minutes or less, a 20-percent improvement over 1997 rates; and
- clear 65 percent of passengers crossing U.S. land borders in non-peak traffic periods in 20 minutes or less on the northern border, and 30 minutes or less on the southern border.

In 2000, AMS will:

- continue a microbiological surveillance program on domestic and imported fruits and vegetables as part of the President's Food Safety Initiative; and
- perform about 55,000 analyses on 13 different commodities, collecting 9,000 samples to measure pesticide residues, an increase from the estimated 1999 activities of about 50,000 analyses, 13 commodities, about 8,200 samples.

**Conservation:** The 1996 Farm Bill was the most conservation-oriented farm bill in history, enabling USDA to provide incentives to farmers and ranchers to protect the natural resource base of U.S. agriculture. Farmers can now use crop rotations, which earlier price support programs had severely limited. Also, the bill created several new programs. The Environmental Quality Incentives Program (EQIP), with \$200 million in annual spending (and another \$100 million proposed for 2000) provides cost-share and incentive payments to encourage farmers to adopt new and improved farming practices or technology, and reduce the environmental impact of livestock operations. Farmers may use different nutrient management or pest protection approaches, with USDA offering financial assistance to offset some of the risk. Another new 1996 Farm Bill program was the Farmland Protection Program (FPP). The U.S. loses more than two acres of farmland to development every minute. The FPP provides cost-share funds for agricultural easements to State, local, and tribal governments to preserve farmland and prevent its conversion to other uses.

USDA's conservation programs give technical and financial help to farmers and communities. They include the Conservation and Wetlands Reserve Programs, which remove land from farm uses; and the Conservation Operations program, which provides technical assistance.

In 2000, USDA will:

- increase the number of acres enrolled each year for riparian buffers and filter strips to 3.5 million, from an estimated 2.4 million acres in 1999;
- increase the number of locally led resource plans developed through EQIP to 400 in 2000, up from 200 in 1999, and

- protect approximately 130,000 productive farmland acres through the FPP from being permanently lost to development.

For more information on conservation, and USDA's investments in public land management, see Chapter 17, "Natural Resources and Environment." USDA programs also help to maintain vital rural communities, as described in Chapter 21, "Community and Regional Development."

**Agricultural Credit:** USDA provides about \$600 million a year in direct loans and over \$2.5 billion in guaranteed loans to finance farm operating expenses and farmland purchases. Direct loans, which carry interest rates at or below those on Treasury securities, are targeted to beginning or socially disadvantaged farmers who cannot secure private credit.

In 2000, USDA will:

- increase the proportion of loans targeted to beginning and socially-disadvantaged farmers to 16 percent, from an estimated 14 percent in 1999 and 11 percent in 1997; and
- reduce the delinquency rate on farm loans to 15 percent, from an estimated 17 percent in 1999 and 18 percent in 1998.

The Farm Credit System and Farmer Mac—both Government-Sponsored Enterprises—enhance the supply of farm credit through ties to national and global credit markets. The Farm Credit System (which lends directly to farmers) has recovered strongly from its financial problems of the 1980s, in part through Federal help. Farmer Mac increases the liquidity of commercial banks and the

Farm Credit System by purchasing agricultural loans for resale as bundled securities. In 1996, Congress gave the institution authority to pool loans as well as more years to attain required capital standards, which Farmer Mac has now achieved.

**Personnel, Infrastructure, and the Regulatory Burden:** USDA administers its many farm programs through 2,500 county offices with over 17,000 staff. The 1996 Farm Bill significantly cut USDA's workload, prompting the Department to re-examine its staff-intensive field office-based infrastructure. In 1999, USDA will: (1) plan to implement recommendations of a study to find ways to operate more efficiently; (2) continue an Administration initiative to scrap duplicative and unnecessary regulations and paperwork; and (3) continue to upgrade its computer systems to streamline its collection of information from farmers and better disseminate information across USDA agencies.

In 2000, USDA will:

- merge the headquarters and State office administrative support staffs for its field office agencies (Farm Services Agency, Natural Resources Conservation Service, Rural Development), consistent with the recommendations of the 1998 consultant's report, to reorganize by business process instead of by agency, to provide more efficient and coordinated support services. Administrative support functions of the county-based agencies will be merged into a single account under the Executive Director of the new Support Services Bureau.